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# BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/635,741 Filing Date: August 05, 2003 Appellant(s): MADHAVAN, SAJEEV

> John P. Wagner, Jr. For Appellant

**EXAMINER'S ANSWER** 

This is in response to the appeal brief filed November 25, 2008 appealing from the Office action mailed September 5, 2008.

## (1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

### (2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

### (3) Status of Claims

The statement of the status of claims contained in the brief is correct.

## (4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct

# (5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

# (6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct

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## (7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

## (8) Evidence Relied Upon

2004/0078622 KAMINSKY ET AL. 4-2004

2004/0039815 EVANS ET AL. 2-2004

#### (9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

# Claim Rejections - 35 USC § 103

- The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- Claims 1-2, 4-16, 18-25, and 27-30 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Kaminsky et al (US Pub. No. 2004/0078622 A1), hereafter "Kaminsky," in view of Evans et al (US Pub. No. 2004/0039815), hereafter "Evans"

As to claim 1, Kaminsky discloses a computing resource management method (Abstract) comprising:

establishing a pool of free computing resources in a computing system ([0026], lines 1-6 and [0023], lines 6-10, the server farm reads on "a pool of free computing resources", and the computing resources of the server farm are free in the sense that the server in available, i.e. it is not currently executing anything);

selecting a free computing resource from said pool of free computing resources to replace an operating computing resource in said computing system ([0033] a new server (free computing resource) is selected from the server farm (pool of resources) to respond to request that was directed to the initially assigned server (operating computing resource)); and

configuring said selected free computing resource to operate in said computing system, after replacing said operating computing resource with said free computing resource in said computing system ([0033], an available server is assigned to replace the assigned server (operating computing resource), i.e. it is configured to operate).

But, Kaminsky does not disclose that said free computing resources comprise resources not preconfigured for use in said computing system according to a configuration of said operating computing resource.

However, Evans discloses a pool of free computing resources in a computing system ([0009], lines 13-15, resources in an idle group read on "free computing resources) and configuring said selected free computing resource to operate in said computing system ([0009], lines 4-15), wherein said free computing resources comprises resources that are not preconfigured for use in said computing system according to a configuration of said operating computing resource ([0024], lines 1-9, when a resource is assigned to a resource group it needs to be reconfigured, i.e. it was not preconfigured to operate for that specific application, in the example a web server).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Kaminsky and Evans in order to optimize the utilization of individual computing resources in a heterogeneous network (heterogeneous in respect to the applications they process) (Evans, [0008]).

- As to claims 15 and 22, they are rejected by the same rationale set forth in claim 1's rejection.
- 5. As to claim 2, Kaminsky and Evans disclose the invention substantially with regards to the parent claim, and further disclose said selected free computing resource is configured to operate in accordance with a configuration of said

operating computing resource being replaced (Kaminsky, [0033], when the new server (free computing resource) is assigned it will inherently be configured to operate the same the initially assigned server (operating computing resource) it is replacing was, otherwise it would not be able to respond to the incoming requests and thereby would not be replacing initially assigned server).

- 6. As to claim 4, Kaminsky and Evans disclose the invention substantially with regards to the parent claim, and further disclose said selecting and configuring said free computing resource is initiated automatically upon a failure of said operating computing resource in said computing system (Kaminsky, [0018], lines 5-9 and [0029], lines 1-3, the retry request reads on "a failure").
- 7. As to claim 5, Kaminsky and Evans disclose the invention substantially with regards to the parent claim, and further disclose said selecting and configuring said free computing resource is initiated in response to an end-user request for a changed operating computing resource in said computing system (Kaminsky, [0018] and Fig. 2, lines 5-9, the client (an end-user) issues a retry request (request for a changed operating resource) to the sprayer which then selects and configures a new server (free computing resource)).
- As to claim 6, Kaminsky and Evans disclose the invention substantially with regards to the parent claim, and further disclose said selecting and configuring of

said free computing resource is based on a usage plan for using said free resources in said free pool of computing resources (Kaminsky, [0033], lines 5-8).

- As to claim 7, Kaminsky and Evans disclose the invention substantially with regards to the parent claim, and further disclose said usage plan for using said free resources is implementable automatically in response to a failure of an operating computing resources in said computing system (Kaminsky, [0029], lines 1-3 and [0033], lines 5-8).
- 10. As to claim 8, Kaminsky and Evans disclose the invention substantially with regards to the parent claim, and further disclose said selecting and configuring said free computing resource to replace said operating computing resource occurs transparently to end-users in said computing system (Kaminsky, Fig. 2, the client (end-user) is not directly aware due to the fact it has no way of seeing the internal communication of the server farm).
- 11. As to claim 9, Kaminsky and Evans disclose the invention substantially with regards to the parent claim, and further disclose said computing system comprises a Utility Data Center (Kaminsky, Fig. 1, label 160, administration node is functionally equivalent to the claimed Utility Data Center).

- 12. As to claim 10, Kaminsky and Evans disclose the invention substantially with regards to the parent claim, and further disclose said computing system comprises a computer network (Kaminsky, Fig. 1, label 130).
- 13. As to claim 11, Kaminsky and Evans disclose the invention substantially with regards to the parent claim, and further disclose monitoring said computing system to detect failed operating computing resources (Kaminsky, [0018], lines 5-9 and [0029], lines 1-3).
- 14. As to claim 12, Kaminsky and Evans disclose the invention substantially with regards to the parent claim, and further disclose relegating said failed operating computing resources to a pool of quarantined computing resources (Kaminsky, [0035], lines 1-5, by taking remedial measures and treating the failed servers differently this is in effect a quarantine).
- 15.As to claim 13, Kaminsky and Evans disclose the invention substantially with regards to the parent claim, and further disclose rehabilitating said failed operating computing resources for reprovisioning into said computing system (Kaminsky, [0035], lines 1-5).
- 16. As to claim 14, Kaminsky and Evans disclose the invention substantially with regards to the parent claim, and further disclose said computing resources

comprise routers, servers, data storage systems and CPU's (Kaminsky, Fig. 1, labels 130 and 150).

- 17. As to claims 16 and 25, they are rejected by the same rationale set forth in claim 2's rejection.
- 18. As to claims 18, 24, and 27, they are rejected by the same rationale set forth in claim 4's rejection.
- 19. As to claims 19 and 28, they are rejected by the same rationale set forth in claim 5's rejection.
- 20. As to claims 20 and 29, they are rejected by the same rationale set forth in claim 8's rejection.
- 21. As to claims 21 and 30, they are rejected by the same rationale set forth in claim 6's rejection.
- 22. As to claim 23, it is rejected by the same rationale set forth in claim 11's rejection.

# (10) Response to Argument

The examiner summarizes the various points raised by the appellant and addresses replies individually.

(1) The appellant argues with respect to the U.S.C. 103(a) rejections of claims 1, 15, and 22 in view of Kaminsky (US Pub. No. 2004/0078622) and Evans (US Pub. No. 2004/0039815) is improper. Specifically contending that Kaminsky teaches away from "configuring said selected free computing resource to operate in said computing system, after replacing said operating computing resource with said free computing resource in said computing system, wherein said free computing resources comprises resources that are not preconfigured for use in said computing system according to a configuration of said operating computing resource." The appellant has relied upon the statement in Kaminsky's abstract which reads, "An automatic server farm which has been configured in accordance with the inventive arrangements can include a multiplicity of servers enabled to respond to requests received from clients which are external to the server farm" (emphasis added by the appellant) to reach this conclusion.

In reply to argument (1), the examiner disagrees and contends the appellant is unduly limiting what the teachings of Kaminsky would have suggested to one of ordinary skill in the art and not fully appreciating what the combined teachings of the

references would have suggested to one of ordinary skill in the art. Specifically, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

That is to say, it is well within the means and technical grasp of one of ordinary skill in the art at the time of the invention to combine the teachings of Kaminsky and Evans as Kaminsky discloses the claimed invention but for said free computing resources comprising resources not preconfigured for use in said computing system according to a configuration of said operating computing resource and Evans discloses a pool of free computing resources in a computing system ([0009], lines 13-15, resources in an idle group read on "free computing resources); configuring said selected free computing resource to operate in said computing system ([0009], lines 4-15), wherein said free computing resources comprises resources that are not preconfigured for use in said computing system according to a configuration of said operating computing resource ([0024], lines 1-9, when a resource is assigned to a resource group it needs to be reconfigured, i.e. it was not preconfigured to operate for that specific application, in the example a web server). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Kaminsky and Evans in order to optimize the utilization of individual

computing resources in a heterogeneous network (heterogeneous in respect to the applications they process) (Evans, [0008]).

The appellant's contention that Kaminsky teaches away from resources not being preconfigured for use in said computing system according to a configuration of said operating computing resource is unduly limiting what the disclosure of Kaminsky would have suggested to one of ordinary skill in the art. Specifically, "An automatic server farm which has been configured in accordance with the inventive arrangements," does not directly contradict or disparage a system in which free computing resources comprise resources that are not preconfigured for use in said computing system according to a configuration of said operating computing resource. That is, the term configured, as used in Kaminsky, need not be strictly limited to the operational configuration of computing resource, but, as is specifically recited, may simply suggest the configuration of the inventive arrangement, e.g. the physical layout. Kaminsky also teaches reconfiguration on-the-fly of the available computing resources as is ([0033], lines 1-5, an available server is assigned, and by handling the request, its computing resources must be reconfigured as they are configured to be in a state of execution), and thus it would not be beyond the means and technical grasp of one of ordinary skill in the art to configure other computing resources on-the-fly such as those in described Evans, when viewing the combination of teachings. Further still, the addition of computing resources that are not preconfigured for use in said computing system according to a configuration of said operating computing resource as disclosed in Evans would not have an adverse

effect on Kaminsky's existing computing resources, as there would simply be more available resources that would be able to be configured as described in Evans above; Kaminsky's disclosed resources would be present and available all the same.

Lastly, the examiner notes one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See In re Keller, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); In re Merck & Co., 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Evans was relied upon to disclose a pool of free computing resources in a computing system ([0009], lines 13-15, resources in an idle group read on "free computing resources) and configuring said selected free computing resource to operate in said computing system ([0009], lines 4-15), wherein said free computing resources comprises resources that are not preconfigured for use in said computing system ([0024], lines 1-9, when a resource is assigned to a resource group it needs to be reconfigured, i.e. it was not preconfigured to operate for that specific application, in the example a web server).

(2) The appellant further contends the proposed modification would change the principle operation of Kaminsky and would render Kaminsky unsatisfactory for its intended purpose.

In reply to argument (2), the examiner contends the addition of computing resources that are not preconfigured for use in said computing system according to a configuration of said operating computing resource as disclosed in Evans would not have an adverse effect on Kaminsky's existing computing resources, as there would simply be more available resources that would be able to be configured as described in Evans above as is well within the means and technical grasp of one of ordinary skill in the art to do so. Therefore, Kaminsky would still be able to provide

For at least the above reasons, claims 1-2, 4-16, 18-25, and 27-30 stand rejected.

multiple servers that are each able to respond to requests ([0017]).

## (11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Thomas J. Dailev

/T. J. D./

Examiner, Art Unit 2452

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